ABSTRACT OF THE DISCLOSURE

Highly fluorinated antimony, especially in the form of a hydrogen fluoride addition compound, can be used as an isomerization catalyst for the isomerization of certain halocarbon compounds or halogenated hydrocarbon compounds. For example, 1,1,1-trifluoro-2,2-dichoroethane can be produced from 1,1,2-trifluoro-1,2-dichloroethane. The method also is suitable for the purification of certain halocarbon or halogenated hydrocarbon compounds which are contaminated by isomerizable compounds.